Analysis of Logistics Performance on The Supply of Goods From Distribution Centers To All Jomtea Brand Beverage Outlets In Batam And Tanjung Pinang Cities

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Abstract. This research aims to evaluate the performance of logistics systems with logistic scorecards on Jomtea Company for Batam and Tanjung Pinang outlets. This research uses primary and secondary data in the form of conducting interviews with logistics officers and using company-related data such as SOP, order letters, goods receipts, etc. In this study did not use population and sample because the study used a logistic scorecard in its assessment. Data retrieval techniques in research use observations, interviews, and documentation. Performance system measurements in companies use logistic scorecard measurements with five perspectives. The results of this study are divided into two storage warehouses and several storage facilities depending on temperature and material safety , and 5 elements of scorecard, namely: Business Strategy Orientation Element with a score of 4, Capacity Planning and Implementation Element with a score of 3, 7,Logistics Efficiency and Productivity Element with a score of 3.4,Information Technology Implementation Element with a scoreof 3.3, and Supply Chain Collaboration Element with a score of 3 that measures performance effectiveness and efficiency.

Keywords: Performance Measurement, Effective and Efficient, Logistic Scorecard

1 Introduction

Logistics system is an important part of activities and activities in a company organization so it needs to be handled carefully for the achievement of effectiveness and efficiency of the work aimed at. In the distribution process this is a very important link. The use of this logical system is still very limited depending on how to maintain a balance between the provision of stock and the needs and interests of the market to use the product or service. On a larger scale, logistics systems become more complex for a variety of reasons and consequences that may be problems related to ineffective systems. National logistics systems can not only deliver the finished product in the right quantities (directly used) or various materials in the time needed, which is not only effective, but also has the lowest total cost and high efficiency, as well as the workings of national logistics systems role in regional and national economic factors. The business referred to in this research is a company engaged in the culinary business. Because business activities in Indonesia continue to grow every year. So that business activities can't be avoided from the amount of competition that occurs. With the occurrence of fairly tight

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competition between business people, then they position how competitive advantage cannot be achieved just by improving within the company only. Regarding this, the need for position from various parties from producers, distributors to objects to consumers through the supply chain *management* system.

Jomtea is one of the culinary beverage and contemporary food companies in Batam city and Tanjung Pinang which currently *uses supply chain management.* With the development that occurred in Jomtea outlets and more and more materials with increasing menu variants, finally created a logistics division (Central Distribution / Distribution Center) that handles all religious activities, ranging from procurement to distribution. With raw material data reaching 1,484 items handled by logistics, there are several problems that occur related to supply chain *management.*

The target of supply chain management is to provide objects appropriately, fittingly which means quantity, quality, place, time of circumstances, customers, and pay (Rushton et al., 2010). In this company the target in question has not been met standards and feasibility on the targets of supply chain management. Management is concerned with efficient and empowered reserves to increase the sustainability of bersing in the industry through industrial capabilities through the ability to pay for creation and distribution and accuracy of products to the end customer (Zaroni, 2017).

Table 1. Problems with Distribution

No	Outlet	Problems
1	Legenda	Mismatch of items that come with the *restock* form
2	Tiban	-Delay in inter-stock due to the distance of warehouses and outlets is quite far - Items were lost during the journey from warehouse to store
3	Batu Aji	-*Stock* delay due to distant location -Congestion of the road to the shop
4	Bengkong	Mismatch of goods comes with existing *forms*
5	Botania	-Mismatch of items that come with the *restock* form dengan *form* yang ada -Distribution lines that are not in line
6	Tg. Pinang	-Distribution and *supply* mechanisms using ship lines -Goods are delivered once every 3 days.

Based on the above data about the problems that occur in the logistics distribution process at Jomtea outlets in Batam City and Tanjung Pinang can be above some cases that occur such as the slow distribution of products due to the large number of jomtea outlets with existing transportation, due to the distance of outlets passed. This problem often occurs and becomes a

major problem for companies and managers of goods supply. Therefore, researchers want to conduct research on **"Analysis of Logistics Performance on The Supply of Goods from Distribution Centers to All Jomte Brand Contemporary Beverage Outlets in Batam city and Tanjung Pinang Cities"**

2 Literature Review

2.1 Logistic Scorecard Model

The Logistic Scorecard (LSC) has been in use since 2001 by the Tokyo Institute of Technology *(Tokyo Tech)* in collaboration with the Japan Institute of Logistics System *(JILS)*. To know the relationship between supply chain performance and managerial performance, LSC is used as a measurement tool. To improve its management patterns in order to compete in the industrial world, Thailand approached the NGO model to measure the effectiveness of supply chain management work (Phuangchampee and Baramichai in Harimurti, 2010). Not just the measurement of the process or business system of the supply chain but the quality control of the process itself. This measurement uses qualitative methods where qualitative information obtained is to be titered to recognize how to regulate business activities and how the plan to achieve them, there is also the weight and priority of KPI in the evaluation *of logistic scorecards.*

2.2 Supplies

According to Tjahjono (2009), inventory is a very important asset for manufacturing and trade companies. Inventory is grouped into current assets due to relatively active assets. Warren (2016), inventory is a trade item that can be stored for later sale or use for production. According to Muller in Addy (2012), the supply of goods includes raw materials, semi-finished materials, and finished materials. Meeting customer needs and minimizing operational costs is the goal of managing inventory. The warehouse part needs the management of inventory trade goods.

2.3 Distribution

According to Chopra (2010), *supply chain* costs are influenced by direct distribution and consumer needs will provide benefits for the company. Low costs to high demand can be overcome properly if the distribution network is done appropriately.Below are some distribution systems are often used in companies (Wahjono, 2010):

1. Producers to consumers.
2. Manufacturers to retailers and then to consumers.
3. Manufacturers against who lesalers of consumer retailers.
4. Manufacturer to agent then to retailer then to consumer
5. Manufacturer to agent then to wholesaler then consumer retailer.

3 Methodology

3.1. Identification of Studies

Identifying studies to collect library data provides additional information in the research process and strengthens the results of research to be carried out, is also the process of introducing and placing objects or individuals in a class according to certain characteristics (Uttoro, 2008)

3.2. Data Collection

In the process of data collection can be done through field research, making observations directly on the research object to get the data needed. This activity is done thoroughly, inductive data analysis and qualitative research results (Sugiyono, 2007)

3.3. Make KPI *Logistic Scorecard*

Determine the KPI to be a guide or indicator of assessment whether the activities and processes carried out are in accordance with standards. KPIs are measurements that assess how an organization or company executes its vision (Warren, 2011).

3.4. *Logistic Scorecard* Research Analysis

Efforts to systematically determine data or data analysis resulting from interview results and other assessments to improve researchers' understanding of the case under study (Noeng Muhadjir, 1998)

3.5. Conclusions and Suggestions Provide advice and input

to the company in order to become more Good again in the future.

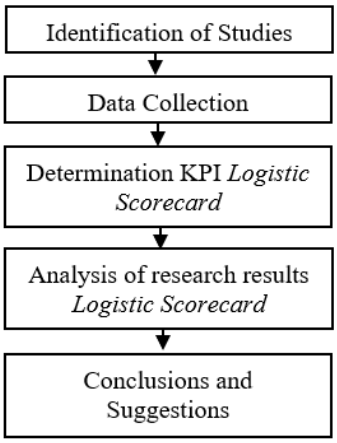

Fig. 1. Research Framework

Research Design

In this stage the research process is carried out starting from research planning, research implementation, and system evaluation. Objects and Scope of Research:

1. Process purchasing
2. Werehousing process
3. Inventory process
4. Transportation process
5. Distribution proces

4 Results and Discussion

4.1. **Logistic Assessment of Model Scorecard**

Table 2. Business Strategy Orientation

Code	Category	Value	Bobot	Score
BS 01	Logistics Business Strategy	4	0.198	**0.792**
BS 02	Counter agreements and information exchanges with suppliers	5	0.0281	**0.1405**
BS 03	Contractual agreements and information exchanges with outlets	4	0.0352	**0.1408**
BS04	Outlet satisfaction measurement and improvement system	3	0.1042	**0.3126**
BS05	Worker *training system and evaluation*	3	0.0644	**0.1932**
Average value		**4**	**0.086**	**0.3158**

Business StrategyOrientation: with an average value of **4** which means that business strategy orientation in Jomtea company, especially in Logistics, shows good logistics **performance.**

Table 3. Capacity Planning and Implementation

Code	Category	Value	Bobot	Score
CPW1	Strategies for optimizing logistics system resources	3	0.0867	**0.2601**

CPW2	Understanding the trend and accuracy of demand forecasting	5	0.0483	**0.2415**
CPW3	Ability to adjust to SCM Logistics planning	4	0.046	**0.184**
CPW4	Inventory monitoring and tracking system	3	0.017	**0.0504**
CPW5	Standardization of all business processes	3	0.0541	**0.1623**
CPW6	Development of logistics department	4	0.0133	**0.0532**
	Average value	**3.667**	**0.0442**	**0.238**

Capacity Planning and **Implementation:** with an average value of **3.7** means that Capacity Planning and Business Implementation in Jomtea company, especially in Logistics, shows **good** logistics **performance,** because there needs to be **improvements.**

Table 4. Efficiency and Productivity of Logistics

Code	Category	Value	Bobot	Score
LEP1	Improvement of logistics activities	4	0.0331	**0.1324**
LEP2	Inventory turnover and cash to cash cycle time	5	0.083	**0.415**
LEP3	*Customer lead time* and load efficiency	3	0.0148	**0.0444**
LEP4	Performance and quality of delivery product	3	0.0138	**0.0414**
LEP5	Inventory management system	3	0.0098	**0.0294**
LEP6	Organizational work environment	3	0.0038	**0.0114**
LEP7	Total logistics costs	3	0.0077	**0.0231**
Average value		**3.429**	**0.0237**	**0.0996**

Efficient and LogisticsProductivity: with an average value of **3.4** means that Efficient and Logistics Productivity in Jomtea company shows **a fairly good** logistics **performance,** because there needs to be **improvements**

Table 5. Implementation of Information Technology

Code	Category	Value	Bobot	Score
ITM1	Standards ofidentification of (code) for products and processes	3	0.0148	**0.0444**
ITM2	Effective use of computers in operation and decision-making between Companies and business partners	4	0.0071	**0.0284**
ITM3	Development of personel IT related to SCM Logistics	3	0.0312	**0.0936**
Average value		**3.333**	**0.0177**	**0.0555**

Implementation of information technology: with an average value of **3.3** means that IT Implementation in Jomtea company shows **a fairly good logistics performance,** because there needs to be **improvements.**

Table 6. Supply Chain Collaboration

Code	Category	Value	Bobot	Score
SCC1	Collaboration on logistics development with Bisni's partner	3	0.1072	**0.3216**
SCC2	Collaboration on logistics development with university research and development institutions, etc.	3	0.0539	**0.1617**
Average value		**3**	**0.0806**	**0.2417**

Supply ChainCollaboration: with an average value of **3** that Supply Chain Collaboration in Jomtea company shows **a fairly good logistics performance,** because there needs to be **improvements.**

5 Conclusion

Based on the results of research on the analysis of logistics performance on the supply of goods from the center is attributed to all jomtea brand beverage outlets in batam and Tanjung Pinang related to procurement to the distribution system can be taken some conclusions as follows:

1. In the distribution of raw materials jomtea company uses two distribution channels, as delivered (Wahjono, 2020), namely Manufacturers-Retailers-Consumers and Manufacturers-Wholesalers-Retailers-Consumers. On the channel of Manufacturers-WholesaleRs Jomtea Company makes warehouse *(werehouse)* as its main distributor and makes jomtea outlets as an intermediary distribution to consumers directly as finished products.

2. - Procurement of goods in Jomtea company is done by *listing* order data that will be given to *suppliers* for the procurement process of goods and materials.

- Storage in Jomtea

The storage system carried out by jomtea is divided into two storage places, namely *general* warehouse and cardboard warehouse. General *warehouse* here is used for activities in and out of goods every day in retail or pcs form. In this warehouse is also divided into several storage places, namely *freezers, showcases,* shelves and cabinets where raw material storage. Furthermore, cardboard warehouses are filled by materials or materials of large capacity. Cardboard warehouse as a storage area for goods or materials to be moved to the *general* warehouse.

3. As for the five perspectives in the *Logistic Scorecard:*

- Business StrategyOrientation: with an average value of 4 which means that business strategy orientation in Jomtea company, especially in Logistics, shows good logistics performance.

- Capacity Planning and Implementation: with an average value of 3.7 means that Capacity Planning and Business Implementation in Jomtea company, especially in Logistics, shows good logistics performance, because there needs to be improvements.

- Efficient and Logistics Productivity: with an average value of 3.4 means that Efficient and Logistics Productivity in Jomtea company shows a fairly good logistics performance, because there needs to be improvements.

- Implementation of information technology: with an average value of 3.3 means that IT Implementation in Jomtea company shows a fairly good logistics performance, because there needs to be improvements.

- Supply Chain Collaboration: with an average value of 3 that Supply Chain Collaboration.

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